BUILDING TRUST

PRODUCT DATA SHEET

Sika® Injection-105 RC

ELASTIC PUR-INJECTION FOAM FOR TEMPORARY WATERSTOPPING

DESCRIPTION

Sika® Injection-105 RC is a low viscous, fast foaming and solvent-free water-reactive polyurethane injection foam resin, which cures to a dense elastic foam with a fine cellular structure.

USES

Sika® Injection-105 RC may only be used by experienced professionals.

- Sika® Injection-105 RC is used for the temporary waterstopping of high water intrusions in moving and non-moving cracks, joints or cavities in concrete, brickwork and natural stonework, plus in foundation pits and pilling works.
- Sika® Injection-105 RC is particularly suitable for structures where some minor movement is to be expected.
- To achieve permanent watertight crack sealing, Sika® Injection-201 CE or Sika® Injection-203 should be injected subsequently.

CHARACTERISTICS / ADVANTAGES

- No reaction takes place unless it is in direct contact with water.
- Sika® Injection-105 RC can be injected as a single component system.
- The mixing ratio of 1:1 allows an easy and safe application with 1- or 2-component pumps.
- The free foaming expansion rate in contact with water is up to 15 times.
- The reaction speed (foam formation) is influenced by the temperatures of the mixed material, the structure and the contact water, plus the hydrodynamic conditions.
- In cold temperatures (< +10°C) Sika® Injection-105 RC can be accelerated using Sika® Injection-AC10.

PRODUCT INFORMATION

Chemical base	Water reactive 2-part polyurethane resin, solvent and CFC free		
Packaging	Part A: 10 or 20 kg	Part B: 11 or 22 kg	
Colour	Part A: Colourless	Part B Brown	
Shelf life	24 months shelf life from date of production if stored properly in undamaged, unopened, original sealed packaging.		
Storage conditions	Dry storage at temperatures from +5°C up to +35°C. Protect from direct sunlight and humidity.		
Density	Part A: ~ 1.00 kg/l	Part B: ~ 1.10 kg/l	At 20°C [ISO 2811]

Viscosity	Part A: ~ 155 mPa·s	Part B: ~ 210 mPa·s	At 20°C [ISO 3219]

TECHNICAL INFORMATION

Expansion	Expansion start: Expansion end:	Approx. 20 sec after contact with water Approx. 80 sec.	At 20°C [EN 14406]

APPLICATION INFORMATION

Mixing Ratio

Part A: Part B = 1 : 1 parts by volume

Reaction time table Sika® Injection-105 RC
[PM 10081-11]

Material Temperature	**Expansion start:**	**Expansion end:**	0%*
+5°C	~ 70 sec	~ 140 sec	
+10°C	~ 35 sec	~ 120 sec	
+20°C	~ 20 sec	~ 80 sec	

Material Temperature	**Expansion start:**	**Expansion end:**	5%*
+5°C	~ 55 sec	~ 120 sec	
+10°C	~ 30 sec	~ 100 sec	
+20°C	~ 12 sec	~ 55 sec	

Material Temperature	**Expansion start:**	**Expansion end:**	10%*
+5°C	~ 45 sec	~ 95 sec	
+10°C	~ 25 sec	~ 80 sec	
+20°C	~ 9 sec	~ 44 sec	

*Dosage of Sika® Injection-AC10 in % by weight of Sika® Injection-105 RC (compoments A+B)
The given data are laboratory parameters and may deviate depending on the object and conditions on site.

Ambient Air Temperature	+5°C min. / +35°C max.	
Substrate Temperature	+5°C min. / +35°C max.	
Pot Life	~ 2 hours (at +20°C); remove skin from the surface (do not mix in!)	[ISO 9514]

APPLICATION INSTRUCTIONS

MIXING

- Empty Parts A and B into a mixing vessel and mix slowly and thoroughly for at least 3 min (max. 250 rpm), until homogeneous, thereby observing the relevant safety precautions. The containers are supplied according to the required mixing ratio of 1 : 1 parts by volume.
- Partial quantities can be measured out into separate vessels. After mixing, pour the material into the pump's feed container, stir briefly and apply within the pot life.
- After mixing, pour the material into the pump's feed container, stir briefly and use within the pot life.
- If the substrate and/or ambient temperatures are < +10°C, Sika® Injection-AC10 can be added to Sika® Injection-105 RC to accelerate the start of expansion.

APPLICATION METHOD / TOOLS

Use injection pumps suitable for single part injection products.

CLEANING OF TOOLS

Clean all tools and application equipment according to the Product Data Sheet for the Sika®Injection Cleaning System.

LIMITATIONS

Sika® Injection-105 RC is generally used for the temporary stopping of high water infiltration. To achieve permanent watertight crack sealing, the subsequent injection of Sika® Injection-201 CE /-203 is recommended.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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